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Insights

Q4 2021 XRP Markets Report

Team Ripple

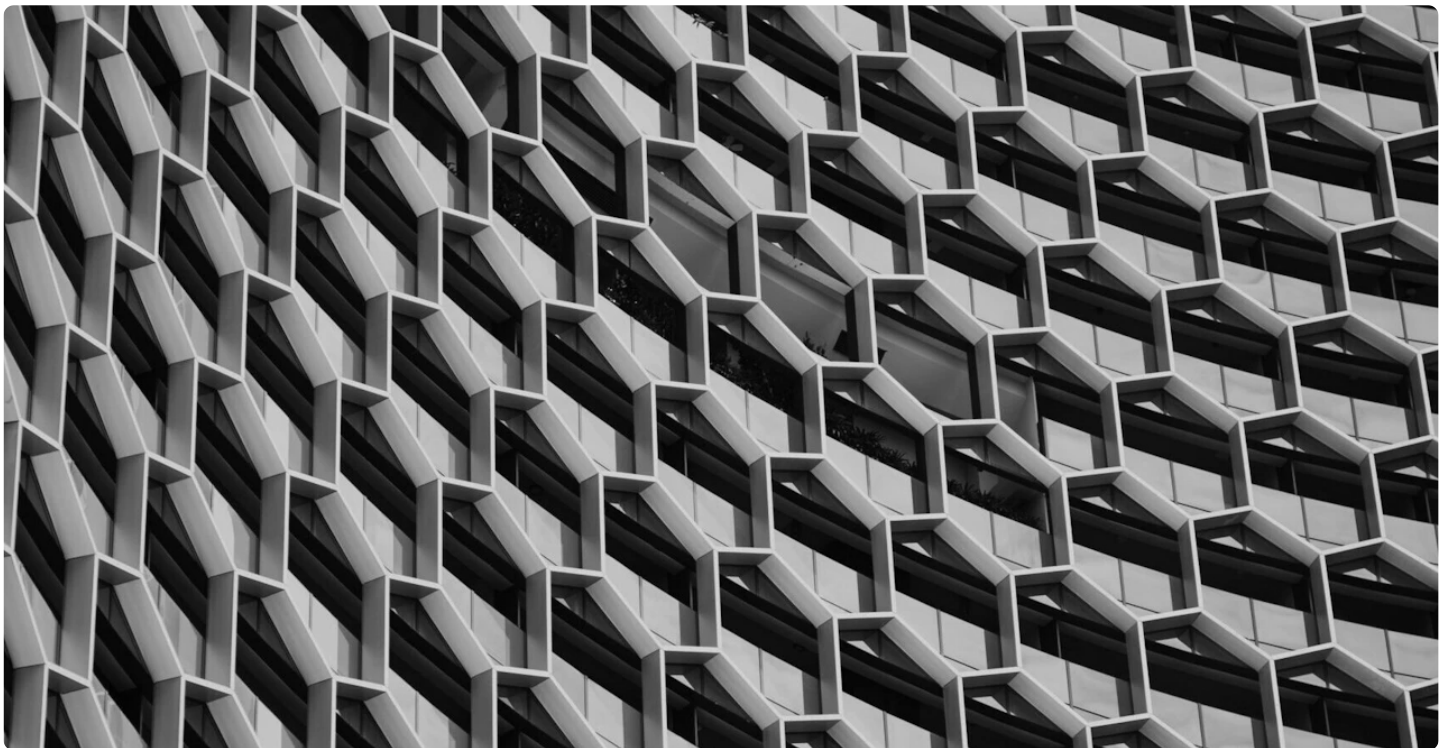
JAN 28, 2022

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XRP



Ripple publishes the quarterly XRP Markets Report to voluntarily provide transparency and regular updates on the company's views on the state of crypto markets such as quarterly XRP sales, relevant XRP-related announcements and commentary on market developments over the previous quarter.

As an XRP holder, Ripple believes proactive communication and transparency are part of being a responsible stakeholder. Moreover, Ripple urges others in the industry to build trust, foster open communication and raise the bar, industry-wide.

Crypto Market Summary

At the start of Q4 2021, crypto markets grew aggressively, fueled by the SEC's approval of the first ever BTC futures ETF in the United States. The ProShares Bitcoin Strategy ETF, which began trading on October 19th, drew a record \$1B in assets in just 2 days. Its success was a reflection of strong institutional demand for BTC exposure. This was a watershed moment for the crypto industry, and the total market cap grew from \$2T to \$3T in the span of a month.

In the end, however, the steep trajectory of growth was unsustainable. Not only had the market moved too far too fast, but the levels of leverage in the derivative markets became precariously high. BTC open interest peaked at \$28B, surpassing the previous record of \$27.2B set in Q2 2020. By the end of 2021, total crypto market cap had returned back to the \$2T mark, with many digital assets ending the quarter below where they started.

With that said, not all digital assets performed the same way. Metaverse-related projects grabbed market attention in Q4 with various high profile fundraises and partnerships. Sandbox, one of the more publicized Metaverse projects, raised \$93M in a round led by SoftBank and announced a digital land acquisition by Adidas. Its native token \$SAND was one of the top performing assets in Q4, gaining more than 600% in the quarter.

Buyers not only flocked to purchase the fungible tokens, but also bought virtual real estate in different metaverses. In one instance, a particular plot of digital land in Decentraland sold for over \$2.43M. Although most of this activity is starting on Ethereum, just like with DeFi and NFTs, it will likely start to shift to more efficient blockchains. With the launch of XLS-20d on NFT-Devnet this month, XRP Ledger (XRPL) developers are well positioned to take advantage of this shift.

Another unique market activity in Q4 was the proliferation of airdrops for token distribution. Airdrops happened across several blockchains, including Cosmos, Ethereum, Solana, Avalanche, and XRPL. On the XRPL, there were over 31 million trustline transactions and more than 50 different tokens were airdropped in Q4. The Sologenic airdrop was one of the more high profile airdrops on XRPL, establishing more than 340,000 trustlines.

Interoperability was also a big theme this quarter, with bridges driving a lot of market activity. In fact, total value locked in bridges increased from \$11.5B to \$26.5B in the span of just three months, as users looked to move assets across chains. XRPL saw a similar trend with a number of bridging solutions announced including WXP and Allbridge.

NFT Spotlight

After hitting record highs in August, NFT trading cooled down in Q4. OpenSea remained the number one NFT marketplace, but volume share slipped from 95% to under 80%. The industry continues to see Solana-based marketplaces chip away at Ethereum's dominance as high gas fees plague both creators and traders.

Q4 saw heightened interest in launching NFTs on the XRPL as projects issued IOUs on the XRPL that would later be redeemed for NFTs. With the release of XLS-20d on NFT-Devnet in January 2022, a standard that provides access to XRPL-native NFT capabilities, developers have an accessible and reliable environment to experiment with NFTs on the XRP Ledger.

Unfortunately, NFT scams – across blockchains – continued to be a concern. This underscores the importance of due diligence as there are no white listed standards for NFT projects. One platform, OnXRP.com has proposed a set of listing requirements for NFT projects on their platform, including KYC & Global ID.

The State of Global Regulation

The industry continues to see more global regulators take a public stance on crypto, with many calling for thoughtful regulation to outright bans of this technology. Ripple released a policy framework, designed to offer an immediate and pragmatic way forward that accounts for the dynamic capabilities of cryptocurrency and digital assets.

In the U.S., crypto executives testified in front of the U.S. House Committee on Financial Services in December 2021, and SEC Commissioner Hester Peirce expressed her disappointment over the absence of crypto on SEC Chair Gary Gensler's regulatory agenda. The SEC also continued its pattern of delaying or denying spot Bitcoin ETF proposals, much to the frustration of industry officials, some of whom may be preparing to file suit against the SEC over its position. Finally, the U.S. continued to take a close look at stablecoins, with the President's Working Group on Financial Markets, together with the Federal Deposit Insurance Corporation (FDIC) and Office of the Comptroller of the Currency (OCC), issuing a report recommending that Congress require stablecoin issuers be FDIC-insured banks.

Globally, Australian lawmakers proposed significant reform of digital asset regulations, citing core principles from Ripple's policy framework. These recommendations were accepted by the Treasury, and the consultations on the regulatory changes are expected in 2022. India and Thailand also intend to consult the industry on regulatory frameworks for digital assets in 2022. South Africa and Nigeria touted the need for regulation as crypto adoption increases, while the Bank of England looked to tighten its oversight of crypto. The Dubai government announced that the Dubai World Trade Centre will become a comprehensive free zone and regulator for digital assets and crypto.

Q4 (and part of Q1 2022) Update on the SEC Lawsuit against Ripple

December 22 marked the one year "anniversary" of the SEC lawsuit against Ripple – and the company continues to seek clear regulatory guidance within the U.S. Notably, the *Wall Street Journal* published a Letter to the Editor from Ripple CEO Brad Garlinghouse in response to former SEC Chairman Jay Clayton touting the promise of crypto technologies and the need for additional U.S. regulation, stating Clayton's change of heart was "staggeringly ironic."

The expert discovery deadline has been extended to February 28 due to COVID and personal matters. On January 13, the court ordered the SEC to surrender several documents to Ripple, including emails about and drafts of former SEC Corporation Finance Director Hinman's June 2018 speech in which he stated ETH is not a security, as well as notes taken by SEC attorneys during meetings with third parties in the digital asset space.

RippleNet EOY Momentum

2021 was RippleNet's most successful and lucrative year to date as global momentum skyrocketed with customer demand despite the headwinds from the SEC. The number of transactions on RippleNet more than doubled, with a payment volume run rate of over \$10B. This is a testament to the product considering Ripple parted ways with Moneygram, its largest customer, immediately after the SEC filed its lawsuit against Ripple. With over 20 payout markets for On-Demand Liquidity (ODL), most recently adding the Middle East, RippleNet continues to see more global demand for the product. Most notably, APAC continues to be one of the largest contributors of ODL volume on RippleNet, more than doubling in 2021.

Disciplined, Responsible Stakeholders: Q4 Sales and Purchases

Last quarter, total XRP sales by Ripple, net of purchases, were \$717.07M vs. \$491.74M USD the previous quarter. Ripple continued to engage in sales to improve the ODL experience of certain customers, eliminating the need for pre-funding at exchanges and enabling instant global payments. As has been the case since Q4 2019, Ripple did not conduct programmatic sales in Q4.

Sales Summary (<i>dollars in millions</i>)	Q3 2021	Q4 2021
Total ODL-related sales*	491.74	1,039.04
Total purchases	0.0	321.97
Sales (<i>net of purchases</i>)	491.74	717.07

Global XRP volume	Q3 2021	Q4 2021
ADV XRP (<i>dollars in millions</i>)	2,075.89	1,830.89
Total XRP volume (<i>dollars in billions</i>)**	189.53	168.41
Net sales as % of total volume	0.26%	0.43%

**All ODL-related sales are attributed to the growth and adoption of ODL*

***Note: Figures were compiled using the CryptoCompare API for daily TopTier aggregate volumes which reflects total XRP volume in dollars by exchanges that CryptoCompare lists in the TopTier.*

Ripple has been a buyer of XRP in the secondary market and expects to continue to undertake purchases in the future at market prices as ODL continues to gain global momentum.

Total sales by Ripple, net of purchases, ended the quarter at 43 bps of global XRP volume according to CryptoCompare TopTier (CCTT) volumes.

Leases

Certain wallets that are being used for XRP sales also provide short-term leases to market makers. This is worth noting given they are often incorrectly interpreted by market participants as sales. Leases are ultimately returned to Ripple. Total leases outstanding in Q4 2021 were 88 million XRP.

Reported Volume

XRP volumes peaked on November 10th, as the crypto market cap hit new all time highs. Overall volumes declined 12% QoQ.

Escrow

In Q4 2021, three billion XRP were released out of escrow (one billion each month) in line with prior quarters and the official escrow arrangement. In total, 2.4 billion XRP were returned and subsequently put into new escrow contracts throughout the quarter. For more information on the escrow process, see [here](#). Note: All figures are reported based on transactions executed during the quarter.

XRP Infrastructure Update

Digivault was the first fully UK Financial Conduct Authority (FCA) registered crypto asset firm to launch support for XRP, fostering the growth of Digivault compliant and risk-focused custody solutions for corporates and high net worth individuals. In addition, Delta Exchange became the first CeFi exchange globally to launch XRP options.

Interoperability

Tokensoft's launch of Wrapped XRP (\$WXR) created another avenue for XRP holders to access the Ethereum blockchain, in addition to the upcoming Flare Network and existing Wanchain bridge. In January 2022, Binance announced support for WXR deposits and withdrawals, so users could frictionlessly switch between networks. Finally, XRPL will soon be integrated with Allbridge, linking the XRPL to 12 different blockchains including Solana, Terra, Avalanche and Polygon. This integration allows XRP to transfer seamlessly onto these chains, as well as making it possible for assets like SOL, LUNA, and USDC to be transferred onto XRPL.

Building with the XRP Community

XRP Ledger On-Chain Activity, Grants and Hackathon

Last quarter, there was a dramatic increase in activity on the network with a total of 130M transactions on the XRP Ledger with \$113B transacted via 114 billion XRP in volume.

Sponsored by RippleX and supported by an independent judging committee, XRPL Grants support the independent developer community building projects of all types on the XRP Ledger and accelerating the Internet of Value. Last quarter, XRPL Grants collected over 100 new applications, with a focus on Federated Sidechains, from the XRPL community. These projects are currently being evaluated, with awardees to be announced in Q1 2022. Meanwhile, prior grantees continued building their projects and contributing to open-source projects. Grantees with notable progress this quarter include Bithomp, Trustline app and ZerpCraft.

More broadly, the community continues to see more projects and apps to address a variety of use cases including Nerian, a network that consolidates data available about a user, and Ridworld, a NFT card game. In addition, an XRPL Hackathon on Devpost inspired a number of software developers to build innovative new projects including:

- Nautilus Wallet provides a digital asset wallet for the digitally excluded
- XRPL Hook Library for AssemblyScript provides definitions for the XRPL Hooks API integration into a new AssemblyScript project
- XRPL Hooks Rust leverages Rust Zero-Cost Abstractions when writing XRPL Hooks
- EstateUp is an XRPL-powered digital will solution

Stability Issues

On November 3, the XRP Ledger halted for approximately 15 minutes in response to several validators experiencing issues. Unlike some other blockchains, the XRPL network recovered automatically and without any human intervention, as it is designed to do, resuming operation albeit under a higher-than-normal load. This resulted in elevated transaction fees and a large transactions queue. That said, elevated fees were still minuscule by comparison to other blockchain fees, remaining at fractions of a penny (0.000240 XRP) versus regular levels (0.000012 XRP).

Together with community members and infrastructure operators, developers worked 24/7 to identify several bugs and develop key optimizations, improving both performance and stability. As server operators upgraded to version 1.8.2 of the XRPL server software, the transaction queue backlog was worked through, transaction fees returned to normal levels and the network stabilized.

Going Green with XRPL

In December, Xange.com announced it will develop a carbon credit solution on the XRPL given its performance, scalability and inherently green attributes. The XRP Ledger was built with sustainability in mind and is one of the first major carbon-neutral blockchains. Due to its Federated Consensus algorithm, the XRPL is significantly more energy-efficient compared to proof-of-work blockchains and ensures low-cost transactions.

Global CBDC Momentum

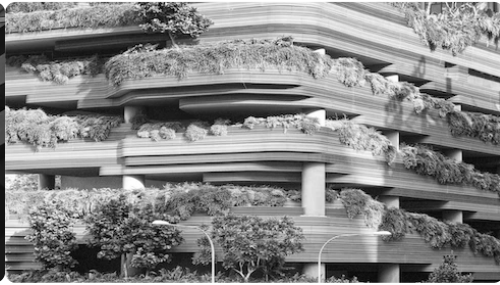
Ripple joined the Digital Pound Foundation to focus on the development and implementation of a digital Pound in the United Kingdom, and continued to engage central banks globally on technical and policy queries related to CBDCs. In addition, Ripple partnered with the Republic of Palau to explore developing strategies for cross-border payments and a USD-backed stablecoin directly on the public XRP Ledger. This could see the implementation of the world's first government-backed national stablecoin, leveraging the XRPL's built-in DEX and tokenization advantages.

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